

REMARKS

Claims 11-14 and 16-21 are currently pending in the application; Claims 11, 17 and 18 are independent. Reconsideration of the pending claims is requested in view of the following remarks.

The Examiner has rejected Claims 11, 13, 14 and 16-21 under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent Application Publication No. 2004/0096804 to Vogt et al., (hereinafter “Vogt”) in view of U.S. Patent Application Publication No. 2004/0101808 to Porter et al., (hereinafter “Porter”). Applicants respectfully submit that this rejection is overcome in view of the following remarks.

Independent Claim 11 recites a transfer part for holding a dental implant. The transfer part includes, *inter alia*, a free extension at one end of the transfer part for coupling a rotational tool and a first radial groove adjacent to the free extension for receiving a securing element. The transfer part further includes, *inter alia*, a clamping portion at the other end of the transfer part for the clamping connection of the transfer part to the dental implant, the clamping connection providing the sole connection between the transfer part and the implant. The clamping portion includes, *inter alia*, a force transmission element for securing the clamping connection against rotation, a second radial groove directly adjacent to the force transmission element, and a clamping ring insertable into the second radial groove to engage with the dental implant. The dental implant also includes, *inter alia*, an internal undercut positioned correspondingly to the second radial groove of the clamping portion of the transfer part and dimensioned suitably to provide together with the second radial groove a receiving means for clampingly receiving the clamp ring.

Independent Claims 17 and 18 both recite at least the above features.

In the Office Action, the Examiner has conceded that Vogt fails to teach or suggest a second radial groove which directly engages the dental implant and is directly adjacent to the force transmission element (see page 3, lines 16-17 of the Office Action). The Examiner has alleged that Porter discloses “a second radial groove (112) adjacent the force transmission element (46)” (see page 4, line 2 of the Office Action). The Examiner has further alleged that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Vogt to include a transfer part having a second radial groove as taught by Porter.

Applicants respectfully disagree with the Examiner in this regard, based on the following reasons.

Although Porter discloses an abutment with a radial groove, which cooperates with an undercut of the implant, the radial groove is not directly adjacent to the force transmission element. In contrast, Claims 1, 17 and 18 all recite that the clamping portion comprises a force transmission element for securing the clamping connection against rotation and a second radial groove directly adjacent to the force transmission element.

In the Office Action, the Examiner has interpreted element (46) of Porter as a disclosure of the claimed force transmission element. Applicants respectfully submit that this interpretation is improper for at least being inconsistent with the explicit teaching of Porter. In Porter, element (46) is denominated as “a non-locking portion” (see Paragraph [0044] of Porter). The non-locking portion has a circular cylindrical cross-section. Thus, the non-locking portion is not capable of securing the abutment against rotation, as opposed to the force transmission element for securing the clamping connection against rotation recited in Claims 1, 17 and 18. Furthermore, the non-locking portion is not located directly adjacent to the radial groove; Porter clearly states

that the non-locking portion does not engage the implant when positioned in the anti-rotation cavity (22) (see Paragraph [0047] of Porter).

Thus, in the first instance, the alleged teaching of Porter fails to teach or suggest a force transmission element for securing the clamping connection against rotation and a second radial groove directly adjacent to the force transmission element, as recited in independent Claims 1, 17 and 18 of the present application.

In fact, Porter discloses a locking portion (48), which secures the abutment against rotation within the implant. Porter further states that the locking portion rotationally lockingly engages the anti-rotation cavity (24), wherein the abutment is prevented from rotating relative to the implant (see Paragraph [0045] of Porter). Porter further discussed the differentiation between the locking portion (48) and the non-locking (46) (see Paragraphs [0047] and [0057] of Porter). However, the locking portion is located remotely from the radial groove (112), rather than directly adjacent to the radial groove.

With regard to Fig. 6D, which was specifically cited by the Examiner, the embodiment shown in this figure includes a locking portion (98) and a non-locking portion (96). It is clear from this figure that the groove (112) is distanced from, rather than adjacent to, both the locking portion and non-locking portion.

Hence, contrary to the Examiner's interpretation of Porter, Porter does not disclose a radial groove located directly adjacent to a force transmission element. As a matter of fact, for the embodiments shown in Porter, imposing the radial groove in this position would reduce the effective length of the transfer part.

Furthermore, Porter does not teach that a clamp ring is placed in the radial groove. Instead, Porter teaches that a toroidal spring is located at the radial groove for indicating whether

the abutment has been correctly seated. Thus, even assuming *arguendo* that a skilled person in the art would be prompted to combine the teaching of Vogt and Porter, the skilled person would not be prompted to add a clamp ring.

In addition, Applicants respectfully submit that Vogt does not disclose a clamping element, which provides “the sole connection between the transfer part and the implant” as recited in Claims 1, 17 and 18. Instead, the axial retention between the adapter (3) and the implant (1) of Vogt is provided by the transfer cap (2), which is an additional component of the Vogt system for snapping to the exterior of the implant and clamping to the adapter. The transfer cap is required and non-dispensable for the Vogt system to achieve the stated results and advantages. Thus, replacing the transfer cap of Vogt would defeat the purpose of employing the transfer cap, inconsistent with the teaching of Vogt.

The radial groove (112) and toroidal spring (116) of Porter are used to provide feedback to a user that the abutment has correctly seated within the implant (see, Paragraph [0060] of Porter). The abutment is secured within the implant using a screw (70). Thus, Porter does not teach or suggest using a radial groove and a corresponding clamp ring to provide the sole connection between a component and an implant. Instead, the arrangement of the toroidal spring is clearly provided as an additional means, which acts primarily to inform the user when a correct seating has been achieved, rather than as a major secure connection means.

Since the toroidal spring is provided only in combination with other retention means, as a means for purely providing feedback, the skilled person would not be motivated to remove the transfer cap of Vogt and replace the transfer cap solely with the radial groove and toroidal spring of Porter; and doing so is inconsistent with the teachings of both Vogt and Porter. This is particularly true in light of the fact that Vogt and Porter concern different components.

Vogt relates to an adapter that is used to insert the implant into the bone, whereas the embodiment of Porter shown in Fig. 6D thereof relates to an abutment intended for permanent connection to the implant after the implant is inserted and osseo-integrated into the bone. The adapter is specifically designed to carry the implant to the implant site and to transfer sufficient torque to screw the implant into the bone, while the abutment is designed to connect to the mounted implant in a non-rotational manner and to support a dental prosthesis. As the adapter of Vogt and the abutment of Porter are intended and designed for different functions, it would not have been obvious for the skilled person to combine the teachings of Vogt and Porter.

In sum, neither Vogt nor Porter, taken alone or in combination, discloses a clamping means, which provides the sole connection between a transfer part and an implant, as claimed. Instead, Vogt relies on an additional element, namely, the transfer cap (2), to connect these components together; Porter teaches the use of a clamping ring only in combination with a screw to secure a different component to an implant.

Hence, if the skilled person were to modify Vogt to create a more secure connection as suggested by the Examiner, the skilled person would not be motivated to use the toroidal spring of Porter as the sole connection between the transfer part and implant, because the toroidal spring is only taught in combination with the use of a screw. The toroidal spring is only provided to provide a feedback, and as such there is no suggestion or motivation within Porter that the toroidal spring would provide the secure connection suggested by the Examiner. Furthermore, the radial groove of Porter is remotely distanced from the force transmission element. Thus, even if the teaching of Vogt and Porter can be combined as suggested by the Examiner, the combination would not result in the combination of features recited in Claims 1, 17 and 18.

Obviousness requires a suggestion of all the elements in a claim (*CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003)) and a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does (*KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)).

Since the hypothetic combination of Vogt and Porter fail to suggest all the elements recited in independent Claims 11, 17 and 18, the rejection of Claims 11, 13, 14 and 16-21 under 35 U.S.C. § 103(a) based on Vogt and Porter is overcome and withdrawal thereof is respectfully requested. Applicants further respectfully submit that the reasoning suggested by the Examiner for supporting the alleged combination of Vogt and Porter is improper.

The Examiner has rejected Claim 12 under 35 U.S.C. §103(a) as allegedly unpatentable over Vogt and Porter, in view of U.S. Patent No. 5,078,605 to Sutter et al., (hereinafter “Sutter”). The rejection is respectfully traversed for at least the reasons set forth below.

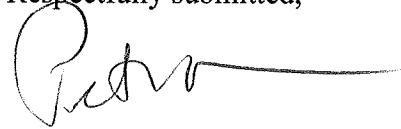
Claim 11, from which Claim 12 depends, is discussed above.

Vogt and Porter are fully discussed above relative to Claim 11. Sutter is applied to allegedly teach the materials, such as PEEK, for making a clamping ring. Without acquiescing in the propriety of the Examiner’s interpretation of Sutter, Applicants respectfully submit that Sutter does not remedy the underlying deficiencies of Vogt and Porter with regard to Claim 11. Thus, taken alone or in any combination, none of Vogt, Porter and Sutter teaches or suggests the combination of features recited in Claim 12.

Accordingly, the rejection of Claim 12 under 35 U.S.C. § 103(a) based on the combination of Vogt, Porter and Sutter is overcome, and withdrawal thereof is respectfully requested.

In view of the foregoing amendments and remarks, it is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



Peter I. Bernstein
Registration No. 43,497

SCULLY, SCOTT, MURPHY & PRESSER, P.C.
400 Garden City Plaza, Suite 300
Garden City, New York 11530
516-742-4343 - Telephone
516-742-4366 - Fax

PIB/HC:ech